

REMARKS

Further consideration of this application courteously is solicited. Specifically, further consideration of this application is solicited along with the submission of a Request for Continued Examination and this Amendment accompanying the Request as the required submission therewith. Claim 1 has been amended further hereby.

Initially, Applicants express their sincere appreciation for the interview that transpired on August 29, 2005. Examiners Brenda Lamb and Fred Parker kindly discussed this application, together with its copending application (Application No. 10/617,865). The interview was very important in discussing the rejections based upon 35 USC § 112 which will be covered below. The rejection of claims 1-3, 7-10, 12, 13, 15, 16, 18, 19, 21, 22, 27, 29, and 30 under the first paragraph of § 112 will be considered first, followed by consideration of the rejection of claims 9, 10, 12, 13, 15, 16, 18, 19, 21, and 22 under the second paragraph of § 112.

Claim 1 was rejected in the June 14, 2005 Office Action under the first paragraph of 35 USC § 112 as failing to comply with the written description requirement. Claim 1 has been amended herein in order to clarify how the subject matter thereof indeed complies with the requirements of § 112.

As amended, claim 1 describes that the “control means” causes both the feeding side valve and the return side valve to open and discharge the coating, before coating of the base material actually begins. Claim 1 continues by reciting that thereafter, the control means causes the return side valve to close (after a predetermined period) to stop discharge of the coating of the return side. By its closing of the return side valve, the control means thus initiates coating of the base material via coating discharge through the feeding side valve.

The manner of operation was discussed at length during the interview. The discussion focused on pages 7 through 9 of Applicants’ specification. Pages 7 through 9 describe Applicants’ first embodiment. Note from page 6 and the brief description of Figures 1 and 2,

that both Figures 1 and 2 relate to Applicants' first embodiment. The apparatus form of this embodiment is more generally shown in Figure 1, with a detailed depiction of the "intermittent means 100" shown in Figure 2. The intermittent means includes feeding side two-way valve 10, return side two-way valve 11, and, as recited in claim 1, a "segment" that connects the two valves 10 and 11 and that connects to the feedline 12 leading to the tank 7.

For convenience, a timing diagram is appended to this paper as Exhibit 1. Reference will be made to Exhibit 1 at the same time as to the operation discussed on pages 8 and 9 of the specification, and Figure 2. In Exhibit 1, time, T_1 , illustrates the conclusion of an application of coating to the base material. According to page 8, the fourth paragraph, at the time that coating is to be restarted, the feeding side valve 10 is opened. This is depicted by time, T_2 , in Exhibit 1. Then, according to the same paragraph of page 8, actual coating of the base material, that is actual application of the paint to the base material, occurs after the return side valve 11 has been closed. This is depicted at time, T_3 in Exhibit 1. Note that the paint coating has a "rising edge" occurring simultaneously with the closure of return side valve 11. It also is important to note that, as described in claim 1, for a finite time, that is between times T_2 and T_3 in Exhibit 1, both the feeding side and the return side valve are open.

Beginning at the paragraph bridging pages 8 and 9, Applicants give specifics of the actual length of time between T_2 and T_3 . Applicants describe this period as not shorter than 5 msec, and not longer 500 msec. As Applicants describe, the return side valve 11 should not be switched (closed) either too early, or too late. Otherwise, as discussed in the first full paragraph on page 9, the starting edge of the applied coating will be too thick, or as discussed in the second full paragraph on that page, the starting edge will be too thin.

Lastly, Exhibit 1 is simplified in one way. From page 9 of the specification, Applicants teach that at the "coating end time," the feeding side valve 10 can be switched (closed) "earlier than that of the return side two-way valve 11 within a range not shorter than 0 msec and not

longer than 100 msec.” (Page 9, third full paragraph.) Obviously, at T₁ in Exhibit 1, switching of the feeding side valve is shown at 0 msec “earlier” than switching of the return side valve.

From the foregoing, Applicants respectfully urge that claim 1, and all rejected claims dependent therefrom are supported fully by the original specification. These claims are submitted as complying with the written description requirement.

Next, the rejection of claims 9, 10, 12, 13, 15, 16, 18, 19, 21, and 22 under the second paragraph of § 112 likewise is traversed. The “coating returning means” is recited broadly enough to be under direct control by the “control means,” or to complement such. In Applicants’ exemplary, preferred embodiments, the “coating return means” corresponds, at least in part, to piston 501 which actively sucks paint from, or pumps paint to the nozzle. This is described, for example, at page 8, lines 4-19. There is no conflict in the claims between the function of the control means, and the function of the recited “coating returning means.”

For at least the foregoing reasons, Applicants courteously submit that all of the claims are in full compliance with the requirements of 35 USC § 112. As such, both rejections as alleged in the June 14, 2005 Action under 35 USC § 112 should be withdrawn. Action in this regard respectfully is solicited.

All of the claims also have been rejected under 35 USC § 103(a) as allegedly obvious over Melbourn et al., Kaido et al., and Fujita in the June 14, 2005 Office Action. Applicants submit that these rejections should be withdrawn in view of proper understanding of the pending claims and Applicants’ invention. At this time, no amendments to the claims are deemed necessary because of prior art. Rather, withdrawal of the rejections over the art is solicited.

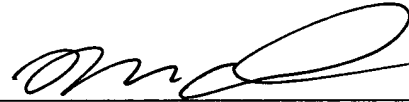
Applicants respectfully submit that this Amendment and the above remarks obviate all outstanding rejections in this case, thereby placing the application in condition for allowance. Allowance of this application is earnestly solicited.

If any fees under 37 C.F.R. §§1.16 or 1.17 are due in connection with this filing, please charge the fees to Deposit Account No. 02-4300; Order No. 033216.038. If an extension of time under 37 C.F.R. §1.136 is necessary that is not accounted for in the papers filed herewith, such an extension is requested. The extension fee should be charged to Deposit Account No. 02-4300; Order No. 033216.038.

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